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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,879	09/08/2000	Toshihiko Oda	S0255.0004/P004	2562

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EXAMINER

PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/658,879

Applicant(s)

ODA, TOSHIHIKO

Examiner

Prieto B.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-6,9-12,15-19,22 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-6,9-12,15-19,22 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____



DETAILED ACTION

1. A request for continued examination under 37 CFR §1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/17/06 has been entered.

Claims 3-6, 9-12 and 15-28 remain pending and hereby are set forth for examination.

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). Certified copy has been received of Application No. 11-255097, filed on 09/09/99 in Japan.

3. Claim interpretation, the claimed terms functions, refers to features, capabilities or functions associated with (devices) printers. According applicant's disclosure a "profile of an ideal virtual device" seems to refer to all the capabilities of the devices collectively, i.e. "integrated" (see specs p. 11, lines 3 to page 17). The broadest reasonable interpretation will be given to the claim limitation in light of the specification (see MPEP § 2111).

4. Cancellation of claim 28 obviated previous rejection under 35 U.S.C. 112, second paragraph, as thus, the rejection is hereby withdrawn.

5. Claims 3-4, 9-10, 15-17 are objected to under 37 CFR 1.75(c) as being in improper form because they depend on a claim that has been canceled, namely, 20-21, 23-24, and 26-27, respectively. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 103

6. Quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action.

7. Claims 3-6, 9-12, ~~15-27~~ 15-19, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy et. al (US 6,496,859) (Roy hereafter) in view of Shimizu et. al. (US 6,609,162) (Shimizu hereafter) in further view of Shiohara (US 6,822,754).

Regarding claim 19, Roy teaches a system/method usable for selecting a device from a number of devices connected to a network, said apparatus comprising:

a detecting unit (10) which detects all the devices (35) connected to the network (45) (col 3/lines 27-37);

an extracting unit (10) which extracts information ("profiles") from the devices information (65) relating to identity of each said device (col 2/lines 31-38, 52-57, extract information: col 4/lines 3-12, data (65): col 3/lines 51-59 and col 5/lines 35-37);

an integrated profile creating unit (10) which creates a collection ("integrated profile") of information obtained by combining or adding the information ("profiles") of said devices (Roy: collection or adding information from and about all located devices: col 5/lines 42-col 6/line 9);

although prior art teach creating a data structure "table" containing a listing of said devices used by the user for selecting a device from among said devices, however, Roy does not teach where the table contains information about the functions available by the device e.g. for the use of each device.

Shimizu teaches creating a user interface enabling a user to select necessary function from the functions of the integrated profile having every function of said devices (column 3, lines 55 to column 4, line 6), wherein the interface that enables the user select necessary functions from the integrated profile (column 11, lines 31 to column 12, line 20); Shimizu teaches selection of a device as a device to be used out of said devices based on the selected functions and the functions available in each device (column 13, lines 19-26). Shimizu teaches

specifying a priority order of based on the number of user selected functions available in each device (column 13, line 27-34). However, Shimizu does not teach where the selection is based on functions available in each device is also based on the selected functions.

Shiohara teaches pertaining to the selection a device (e.g. printer) among a plurality of printers (abstract) based on the processing information in each device (column 4, lines 1-7, 56-60), particularly, selecting a device to be used among a plurality of devices based on selectable necessary functions associated with the device (column 4, lines 66 to column 5, line 7 and column 5, lines 49-59).

It would have been obvious to one of ordinary skill at the time the invention was made given the teachings of Roy for selecting a device among a plurality of device to include the teachings of Shiohara. Because in doing so Roy would be enhanced with selection of one or multiple devices based on the functions/features required by the print job (e.g. large document or a document file including text data and image data, requiring that the text data portion be printed at a monochrome laser printer, and the image data part be printed at color ink jet printer, would be user selectable via the interface taught by Shimizu. Namely, Shimizu's interface in Roy's system would enable a user to select a necessary function(s) from the functions of the integrated profile, e.g. selecting a monochromatic mode or a color mode, the sheet size, the number of printed copies, and the like, which are used by the Shiohara reference to select one or multiple devices among a plurality of devices. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Shiohara in the Roy-Shimizu's system because in doing so it will enhance it with means for selecting a device to be used among a plurality of devices based on selectable necessary functions associated with the device (e.g. a monochrome/color printer, a A2-size paper, number or copies, or the like) via the Shimizu's interface and thus, selected a device among a plurality of devices based on the particular print job required and the determined device state, which reduces the printer selection time, as suggested by Shiohara.

Regarding claim 3, a user interface created by said user interface creating unit which displays information relating to the functions comprising the integrated profile for a user's selection ("with respect to a user") on a display screen (Roy: Fig. 7) and enables the user to select

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necessary categories of functions from the categories of functions displayed on said display screen (Shimizu: selecting a desired function from among a category of functions col 13/lines 11-47).

Regarding claim 4, a memory unit which stores the profiles extracted by said extracting unit (Roy: data structure to store device information: col 3/lines 5-59), wherein when said selecting unit has used ("consulted") the stored profiles and determined that there is no device comprising all the categories which have been selected via the user interface, said selecting unit selects said device from among said devices which comprises a part "subset" of the selected categories (i.e. given the stored profiles (device information), the categories (device function or capabilities) selected by the user and a predetermined priority, if no device comprises all the categories the device satisfying as much desirable conditions as possible is selected (Roy, col 5/lines 18-25).

Regarding claim 5, when a new category "reselects" has been selected via said user interface after said device has been selected, said selecting unit reselects said device by including the category which has been selected this time by priority in said part of the categories (i.e. selection of categories by priority enable the selection of device that satisfies selected category (or new category) when the device contains that is satisfies all required categories selected by the user according to a specified priority, e.g. priority B, wherein conditions that should preferable (most of or in part of the categories) (Shimizu: col 13/lines 15-34).

Regarding claim 6, wherein said devices are printers 35 (Roy: abstract, col 3/lines 27-37).

Regarding claims 9-12, these claims are substantially the same as claims 3-6, respectively, same rationale of rejection is applicable.

Regarding claims 15-18, these claims comprises the apparatus or software implementation, i.e. computer readable medium for storing instructions, which when executed by a computer, causes the computer to perform the functions discussed on apparatus claims 3-6, respectively, same rationale of rejection is applicable to the computer product claims.

Regarding claim 22, this claim is substantially the same as claim 19, as discussed above, same rationale of rejection is applicable.

Regarding claims 25, this claim comprise the computer readable medium storing the executable instructions associated with the method and apparatus discussed on claims 19, same rationale of rejection is applicable.

Response to Arguments

8. Regarding claims 22, it is argued (p. 8 of remarks) that the applied reference(s) does not teach or suggest claim limitation as added. Namely, does not teach or suggest a table specifying a preferred priority order for use of the devices ... based on the number of user selected functions available in each device; and selecting one of the devices based on the set of functions selected by the user ... and the preferred priority order specified by the table. Because according to Applicant (p. 9 of remarks), the Roy references teaches that a device location protocol (DLP) over UDP broadcast request is sent out that includes a list of devices, such as printers, that have responded. The request is that only devices not on the list respond. Responses are then parsed and the responding device's network address is added to the list of responding devices (column 2, lines 44-49). Roy FIG. 7 shows an alphabetical list, but Roy is otherwise silent with respect to any order of devices in the list. The citation to Roy in the Office Action (at page 9) to support a "priority order" refers to claim 3 of Roy, having limitations matching col. 2, line. 44-49. Applicant respectfully submits, however, that Roy does not disclose, teach, or suggest specifying a preferred priority order for use of the devices based on the number of user selected functions available in each device, as recited in claims 19, 22, and 25. Nor does Shimizu disclose, teach, or suggest these limitations. Rather, Shimizu teaches that "priority is given in the order of the a [sic] printer having the highest speed a printer having the second highest speed -- a color printer." (column 13, line. 29-31). No other priority order is disclosed, taught, or suggested by Shimizu.

In response to the above-mentioned argument, Applicant's interpretation of the applied reference has been considered. Roy teaches detecting all devices connected to the network, namely, where a user wishing to find *all* devices that reside on the network and obtain information from those devices can do so using a device discovery request (column 3, lines 25-37). Roy teaches a table creating unit which creates a table related to a "priority" order (e.g. alphabetic listing) of said device on Figure 7, as noted by Applicant.

Shimizu teaches specifying a preferred priority order for use of the devices based on the functions available in each device (column 13, lines 29-31), as noted by Applicant.

Shimizu teaches creating a user interface enabling a user to select necessary function from the functions of the integrated profile. Namely, displaying all functions which can be realized by combination of devices on the network, i.e. "virtual device" having every function of said devices (column 3, lines 55 to column 4, line 6). Shimizu teaches providing an user interface that enables the user select necessary functions from the integrated profile, including functions, e.g. selecting a monochromatic mode or a color mode, the sheet size, the number of printed copies, and the like (column 11, lines 31 to column 12, line 20).

Shimizu teaches selection of a device as a device to be used out of said devices based on the selected functions and the functions available in each device, particularly, based on the number of selected functions and the functions available in each device. Specifically, when the user has selected a number of selected functions (e.g. one copy in a monochromatic mode), a selection may be made between devices based on the number of user selected functions and the functions available in each devices (e.g. printers 2095, 2903 and a facsimile apparatus 2094) may be selected (column 13, lines 19-26), where printers 2095, and 2903 are a monochromatic (column 4, lines 58-61).

Shimizu teaches specifying a priority order of based on the number of user selected functions available in each device. Specifically, where when the user has selected a number of selected functions (e.g. one copy in a monochromatic mode), priority is given in the order of the a printers having selected functions available in each device (e.g. monochromatic printers 2095, and 2903), wherein a priority order, e.g. according to their speeds, i.e. a first printer having the highest speed and a printer having the second highest speed, thus a priority order (e.g. first and

second) based on the functions available on the device and based on the selected function (e.g. monochromatic selection) (column 13, line 27-34).

Shiohara teaches pertaining to the selection a device (e.g. printer) among a plurality of printers (abstract) based on the processing information in each device (column 4, lines 1-7, 56-60), where the processing information includes functions available in each device (column 5, lines 39-48).

Shiohara teaches selecting a device to be used among a plurality of devices based on selectable necessary functions associated with the device. Specifically, a selection element compares the print processing information (i.e. functions available therein) received from the devices (e.g. printers) to select an appropriate device (i.e. printer). The selection element select one or multiple devices based on the functions/features required by the print job (e.g. large document or a document file including text data and image data, requiring that the text data portion be printed at a monochrome laser printer, and the image data part be printed at color ink jet printer) (column 4, lines 66 to column 5, line 7), where the selection involves, for example, if the print contents requires color printing on A2-size paper, this cannot be accomplished by a printer in which A2-size paper is not set or by a printer dedicated to monochrome print only. The number of printers in the network that are capable of handling a particular print job can thus be determined based on the printer state, which reduces the printer selection time (see column 5, lines 49-59).

It would have been obvious to one of ordinary skill at the time the invention was made given the teachings of Roy for selecting a device among a plurality of device to include the teachings of Shiohara. Because in doing so Roy would be enhanced with selection of one or multiple devices based on the functions/features required by the print job (e.g. large document or a document file including text data and image data, requiring that the text data portion be printed at a monochrome laser printer, and the image data part be printed at color ink jet printer, would be user selectable via the interface taught by Shimizu. Namely, Shimizu's interface in Roy's system would enable a user to select a necessary function(s) from the functions of the integrated profile, e.g. selecting a monochromatic mode or a color mode, the sheet size, the number of printed copies, and the like, which are used by the Shiohara reference to select one or multiple devices among a plurality of devices. It would have been obvious to one of ordinary

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skill in the art at the time the invention was made to utilize the teachings of Shiohara in the Roy-Shimizu's system because in doing so it will enhance it with means for selecting a device to be used among a plurality of devices based on selectable necessary functions associated with the device (e.g. a monochrome/color printer, a A2-size paper, number or copies, or the like) via the Shimizu's interface and thus, selected a device among a plurality of devices based on the particular print job required and the determined device state, which reduces the printer selection time, as suggested by Shiohara.

9. Applicant's arguments filed with the above-mentioned communication have been fully considered but not found persuasive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Thursday from 5:30 to 2:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Andrew T. Caldwell can be reached at (571) 272-3868. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see <http://pair-direct.uspto.gov> or the Electronic Business Center at 866-217-9197 (toll-free).

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B. Prieto